Summary of Progress from Inception:
The various approximate calculational methods in the literature have been reviewed and a procedure used by Langweiler has been used for making experimental calculations.

This Quarter's Work:
The Langweiler technique is being simplified and a technique for powder measurement similar to that used by Frankford Arsenal is being tested. Data are being taken on shot shell powders.

Proposed Next Quarter's Work:
The above phases of the work will be completed in approximately four or five months on the present schedule.

Project: Primer Sensitivity for Fire Control Design - TP-3388
Personnel: M. W. Maughan, T. Stewart
Authorized Amount: $4,250 Total Expended to Date: $1,539

Nature of Problem:
This project proposes to obtain data on primers and provide a simple method for specifying and measuring the firing pin blow for firing mechanisms designed at Ilion.

This Quarter's Work:
Run-down curves on .30/06 primed cases using four different ball weights have been taken. The data seem to indicate that a satisfactory statement can be made as to how fast a given striker should move in guns firing the .30/06 cartridge.

Proposed Next Quarter's Work:
Similar data will be obtained on other cartridges during the next Quarter. Efforts will also be made to obtain a correlation of the striker energy necessary for primer firing with amount of indent in a copper crusher or to obtain similar means of mechanically indicating striker energy. Some effort has already been spent on this but good correlation has not yet been obtained.

Project: Primer Setback Autoloading Means - TP-3389
Personnel: T. Stewart
Authorized Amount: $7,200 Total Expended to Date: $5,067

Nature of Problem:
An inventor, H. R. Clarke, demonstrated to us a caliber .30 carbine utilizing an action unlocking on primer setback and actuated by blow back. This has been carefully examined with a view to using his principles on other cartridges.

Summary of Progress from Inception:
It was found that any center fire cartridge would